

METHODOLOGY FOR INTERAGENCY HISTORIC PRESERVATION PLANNING ACTIVITIES - FINAL REPORT

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As a part of an overall investment strategy, a plan is needed to provide effective and efficient technical support to base engineering offices to assist with the operation, maintenance, repair and rehabilitation of buildings. While all buildings will benefit from the implementation of the plan, special emphasis will be given to the problems of older and historic buildings to assist with the technical needs for compliance with the 1966 Historic Preservation Act, as amended.

Emphasis is given to establishing and providing information and assistance to users in a form which is useful for them to perform their required tasks for design, repair, preventive maintenance, and diagnosis.

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ABSTRACT

The Facility Systems Division (FS), in response to the large and growing need for technical support for the maintenance, repair and rehabilitation of older and historic buildings, is developing a Historic Preservation Center. This center is one part of an overall investment strategy for facility programs. The initial step in the process is the definition of needs and the design of a program which is responsive to the needs of DOD agencies. This draft document explores the most critical needs for technical support and outlines the initial objectives and tasks for the Center.

The preliminary design includes the following objectives: Specific sub-tasks may appear under more than one objective if the sub-task program supports multiple objectives.

I. IMPROVE ACCESS TO INFORMATION

- A. Develop lists of information sources
- B. Develop information exchange programs with selected Federal Agencies
- C. Collect and standardize specifications and procedures
- D. Identify, collect and organize resource data

II. TRANSFER INFORMATION EFFECTIVELY TO USERS

- A. Publish technical information
- B. Develop a Preservation Procedure Control System
- C. Develop an Automated Vendor Source List
- D. Develop small expert systems diagnostics tools
- E. Develop training programs to increase expertise.

III. PROVIDE LEADERSHIP IN THE FEDERAL SYSTEM

- A. Work with National Preservation Center planners at Georgia Tech
- B. Establish one or more "user groups" among agencies with common interests

IV. TRANSFER TECHNOLOGY TO THE PUBLIC AND PRIVATE SECTORS

V. IMPROVE MATERIALS AND METHODS IN PROFESSIONAL USE

- A. Identification of research and technical needs
- B. Development of Automated Vendor Source List
- C. Development of Preservation Procedures Control System
- D. Development of Expert Systems
- E. Participation in CRIS
- F. Development of image processing study tools
- G. Development of a video tape lending library of methods and techniques

A key condition for success is the establishment of relationships with other organizations in this technical field, possibly through the "user group" approach, and the development and delivery of needed information to end users to enhance the quality and consistency of work to buildings.

CERL INTERAGENCY HISTORIC PRESERVATION PROGRAM FOR BUILDING TECHNOLOGY

INTRODUCTION

This report outlines a plan to establish a center of expertise with the Corps. of Engineers to support building operations and maintenance needs for historic, and potentially historic buildings in DoD agencies. These agencies are faced with numerous technical needs, challenges and limitations in attempting to comply with the 1966 Historic Preservation Act, as amended. A key element of this plan is recognizing these technical needs and providing support in a variety of innovative ways to improve the ability of base engineering offices to respond to problems, and execute appropriate building maintenance and repair work. A listing of the major Federal laws and regulations affecting historic and potentially historic buildings is attached as Appendix A.

It is acknowledged that there are many other technical areas associated with compliance which need attention, and which relate to building operations and maintenance. Many of these areas, such as planning and environmental review; documentation for planning; legal compliance and Section 106 review, are better addressed at a level above the single building level. This plan focuses on the important progress which can be made at the building level, where the lack of information, technical resources and expertise is a serious and worsening problem.

The developing historic preservation technical support center should be approached as a new organizational component, or program, of the Facility Systems Division, to be ultimately transferred to an operating location for maintenance. It should have an organizational design which allows it to function as a component of the Facility Systems Division, yet have its own mission, objectives, strategies and tasks. Two central tenets should guide the Center's development -- 1) that the information and techniques useful for historic buildings are, in many cases, useful for most older buildings and 2) the concern and responsibility surrounding historic buildings is shared by many other military and non-military government agencies; therefore, awareness and information sharing across agencies will be beneficial to all involved. A central task of this work is the identification of existing programs of demonstrated effectiveness which can be utilized within DoD to achieve the Center's objectives, as stated in this report.

Numerous technical needs and problems exist in the management of DoD historic buildings. Individual technical topics or subjects may number in the hundreds, and each carries with it a requirement for time and expertise to sort through the content, purpose and implications associated with it. The development of a support program requires that some logical structure be developed, within which the individual needs, topics, problems and/or projects can effectively be addressed. The following set of objectives is recommended as a basis for establishing a center of expertise which is both comprehensive and responsive. Staffing implications have not been considered at this level, but identification of the full range of programmatic requirements has been attempted. The recommended program mission has been developed on the basis of the authors' with several such programs, including a review of the design of a National Center for Preservation Science and Technology as recommended by the Office of Technology Assessment (OTA) of Congress in 1986.

PROGRAM OBJECTIVES:

The objectives for the Facility Systems Preservation program are based upon identified DOD needs and a logical, set of requirements for responding effectively. The objectives include:

- I. Improve Access to Information
- II. Transfer of Information Effectively to Users
- III. Provide Leadership in the Federal System
- IV. Technology Transfer to the Public and Private Sector
- V. Improve Materials and Methods in Professional Use

These are all interrelated objectives which must be coordinated and developed in the context of the program.

SCOPE OF THE TECHNICAL SUPPORT CENTER

Each of the five recommended objectives of the program is discussed in detail in the following sections. A partial listing of specific project areas is included under each title section. The five objectives are a response to a widely recognized set of problems related to information management. These five objectives form a framework for the Center's mission.

In the interest of efficiency, every effort will be made to identify and track projects, expertise, programs and publications which have applicability for DOD programs. Where possible, mutually beneficial relationships should be established which will allow DOD access to, and use of, such data. The obvious benefits include elimination of redundancy; immediate or early availability of effective methods, techniques and programs; and reduced costs. It is expected that such interagency relationships will enhance CERL's ability to transfer technology and will have positive implications for CERL, the Army and DOD as leaders among Federal agencies in cultural resource management.

The technical scope of the activities under this program will be limited to programs, projects, publications and methods affecting buildings/structures. As stated earlier, other activities which cross, or go beyond, work to specific buildings may be within the scope of other CERL Divisions. There will be a strong need to communicate and coordinate activities and programs between all parties playing active roles in cultural resource management. There is a direct, but sometimes complex, interrelationship of issues, needs, goals and programs which exists between planning/policy functions and technical work (i.e. design, construction, maintenance and repair) to buildings. THESE RELATIONSHIPS SHOULD BE ESTABLISHED AND CLEARLY STATED AS PART OF THE ARMY'S HISTORIC PRESERVATION PLAN. If this has not been done, or if there is not a formal plan, the development of such should be given top priority, especially since the DOD, the Army and CERL have such a vast amount of experience which could be of great value in other Federal Agencies, state and local governments and the private sector. This kind of broad technology transfer, coordinated by the Army Historic Preservation Plan would support the technology transfer goals of CERL. Examples of potential projects or tasks under each of the five objectives are included in the following sections.

I. ACCESS TO INFORMATION

This objective is established in response to the well known problem of building managers or other professionals being unaware of the existence of relevant technical data which addresses or contributes to solutions to building problems. It covers several aspects of the problem:

- *Direct lack of awareness of the existence of needed data*
- *Inability to obtain needed technical data*
- *Inability to properly interpret and apply data to contemporary problems*
- *The need for information sharing at the Federal level*

The FS Historic Preservation Program must develop programs and processes which increase and extend staff awareness of historic preservation information and activities. This awareness of activities, methods, publications and resource experts will have value for DOD. The acquisition of relevant material and its interpretation will provide support for the program objective of "transferring technology to users".

Potential strategies or tasks under this objective include:

A. DEVELOPING A LIST OF INFORMATION SOURCES

Many public and private groups or organizations engage in preservation activities. Degrees of quality and relevance to DOD needs vary, but many have some potential value as sources of information. Many groups publish technical information and there should be a short list of priority sources to track. A preliminary list of sources and organizations is attached as Appendix B.

B. DEVELOP INFORMATION EXCHANGE PROGRAMS WITH SELECTED FEDERAL AGENCIES.

Some of the primary resources identified in the previous item will be Federal Agencies. Although all Federal Agencies are required to designate a Historic Preservation Officer, not all such agencies have building preservation programs or publications. As a part of this task, we have identified and ranked Federal Agencies with substantive preservation construction, design or publications activities. We recommend that linkages be established to these programs for information exchange. Such a linkage could be developed via a "user group" with a University implementor.

The first agencies recommended to be considered for information exchange are:

NATIONAL PARK SERVICE (MULTIPLE PROGRAMS)
GENERAL SERVICES ADMINISTRATION

Additional Federal Agencies which might have an interest in utilizing data from CERL, include all members of the Federal Construction Council. A list of their members is attached as Appendix C. These agencies may be potential "user group" members or CERL, as a member, might choose to use the Federal Construction Council as a vehicle for communication and coordination. It is assumed that CERL will monitor any Army or DOD programs with potential contributions or needs to add to the priority list above.

C. COLLECT AND STANDARDIZE SPECIFICATIONS AND PROCEDURES

One of the greatest problem areas in the operation and maintenance of older buildings is the lack of specific technical guidance at the level where general construction work is planned and executed. Volumes of information exist, but it is rarely collected, organized and shared in any institutionalized way. The result is that the individual project designer is often left to his/her own devices to develop work scopes and supporting specifications, thereby leaving much room for errors and mistakes.

The General Services Administration is currently moving to suggest a coordinated Federal action to agree on a common/standardized format for maintenance and repair specifications or procedures. This is an active area for interagency cooperation and data sharing in terms of work load and results. This is a large and continuous task, particularly when linked to the need for programs to manage and disseminate the data once it has been identified, collected, evaluated and edited.

The FS should make the collection, organization and delivery of specifications and procedures a high priority. There is ongoing work in this area which could leverage significant external funds to this task on a matching basis. This is a large task and the recommendation is to work out a sharing arrangement with other agencies where different groups support the effort in different technical areas such as masonry, metals, paint, etc., and all share the results. It is believed that interest exists in other Federal agencies to explore such an arrangement.

Both GSA and NPS have undertaken initiatives in this area, in cooperation with the Center for Architectural Conservation (CAC) at Georgia Tech. Both agencies have expressed a willingness to cooperate in this area and CAC is coordinating the work to assure compatibility across the agencies.

D. IDENTIFY, COLLECT AND ORGANIZE RESOURCE DATA.

Information on technical resources such as professional experts, laboratories, training opportunities, collections, organizations and products is as critical to successful project work as the procedural information discussed in the previous section. A recent affirmation of the value of this data came during the Army DEH Conference in Baltimore in December 1988. During demonstrations of the "Expert System for Recommending Repair or Replacement of Windows", developed by the Facility Systems Division of CERL. Numerous observers expressed special interest in the prospective "vendor list" provided at the conclusion of the program. The collection and organization of such data would support the proposed "Automated Vendor Source List" in Section II.C. which follows. The intense interest in a "filtered" list of prospective vendors reflects the magnitude of problems in the procurement process. Lack of information on appropriate, qualified vendors, inadequate specifications and other difficulties often contribute to inadequate results. Identification of qualified vendors not only supports the competitive process but it protects the public interest.

Activities under this task could be narrowed or expanded as desired, and could include building specific data, linkages to product performance tracking and other useful reference tasks.

II. TRANSFER OF INFORMATION EFFECTIVELY TO USERS

Information identified and collected is not useful unless it is delivered, in an appropriate form, to users who need it. Technology transfer must, therefore, be an integral part of the FS Historic Preservation Center.

General problems in historic preservation include lack of awareness, inadequate networking and difficulty in users obtaining needed technical information. Tasks under this part will be directed at reducing this problem by implementing effective delivery of information in several commonly needed areas and forms, such as specifications and resources.

A. PUBLISH TECHNICAL INFORMATION

Information of various types may be distributed to DOD at all levels through CERL's established publications programs. The information exchange created by items I.A. and I.B. above are likely to result in a considerable volume of applicable technical documents. Reciprocal agreements could allow the re-publication and distribution of any applicable publications as CERL reports with due credit to the source.

On behalf of CERL, NPS has been approached with the idea of such agreements and they have indicated a willingness to establish such agreements, whereby publications such as the twenty-one "Preservation Briefs" and two dozen "Tech Notes" could be printed and distributed under CERL or USACE logos, with credit to NPS.

Activities under this section could begin immediately. The only action needed is to initiate discussions and draft the agreement. The Center for Architectural Conservation (CAC) would be willing to coordinate this process and draft a preliminary basis for the discussion.

Tasks under this section could be expanded -- 1) to other publications series of NPS and 2) to other government and/or private sources such as those identified in Appendix B.

B. DEVELOP A PRESERVATION PROCEDURES CONTROL SYSTEM

The specifications and procedures identified and processed as a part of section/task I.C. above must also be distributed effectively to users. The volume of data and the quantity of topics (over 1,500 major CSI subdivisions) almost mandates an automated system to manage the data, including data entry, printing, cross-referencing and searching to match parameters set by users.

Some conceptual research and development has been done in this area, and ongoing work by NPS and GSA could be used as a "departure point" for a CERL Center. This approach would result in both cost and time savings while providing a flexible system for responding to user needs. The system could be centralized and used for technical assistance on demand, or decentralized and updated through the linkage to the University community. See comments in section I.C. regarding a sharing of responsibility in the development and delivery of this information.

C. DEVELOP AN AUTOMATED VENDOR SOURCE LIST

Data collected as a part of task I.D. above may be delivered to users through an automated system for various subject matter areas, such as "product types" and "services" needed. Please refer to task I.D. above for a discussion of the data needs.

The purpose of the system would be to support procurement by allowing potential vendors to be included in the competitive bidding processes. It would fill an existing gap where the kinds of specialty products and services associated with older buildings are not readily visible to users. Archaic materials and systems no longer in production are often supported by small, independent vendors who do not advertise in the mainstream sources, such as Sweet's Catalog, used by most A&E

offices. An example of this is the steel double-hung window; while very common in the 1920's through the 1940's, no American company currently makes a steel double-hung production window. This is one of hundreds of areas where data on suppliers, consultants and other areas is vital to identify proper courses of action, or options. Other examples include large steel casement windows which are prominent in many Federal buildings. Repair and Replacement (reverse order) options and vendors are not always clear to design and construction personnel immersed in a myriad of project problems and decisions:

The preliminary design for a system to perform these functions is available to CERL from CAC to be extended and implemented as the "Automated Vendor Source List". The system also includes information on training, collections, organizations and consultants with a relevance to Historic Preservation.

D. DEVELOP SMALL EXPERT SYSTEMS DIAGNOSTICS TOOLS

This system is discussed in detail in section V, "Upgrade of Materials and Methods". It is referenced here because one major purpose of an expert system is the distribution of expert knowledge to a broader base of non-expert users. Such a method, or series of tools, would support the objectives of all sections of the FS Historic Preservation Center mission but especially sections II and V.

E. DEVELOP TRAINING PROGRAM TO INCREASE EXPERTISE

Training must be a prominent feature of any sound investment strategy. The activities which maintain, operate, change and preserve buildings occur at the facility level. Incremental increases in the knowledge, skills and ability of personnel at this level has one of the highest "paybacks", in terms of:

- earlier diagnosis of problems
- higher quality decision about design, repair and maintenance
- reduced problems
- increased consistency of quality across facilities
- higher productivity
- better morale, and
- reduced levels of required intervention.

Training can take many forms such as courses, guides, audio and video tapes and technical support. It may include seminars; lectures; extended courses; demonstrations; conferences; exchanges of personnel, or other similar activities. It is the goal of the FS Center to utilize all of these methods in the expertise of field personnel.

Special emphasis will be given to exploring the role of "developmental assignments" and to developing a strong linkage to the Prospect Training Center at Huntsville, Alabama. The objective is to create a dynamic and expanding mix of training resources, targeted to the Army's technical needs identified and prioritized as a part of the FS Center activities. Examples of activities may include exchanges of Army and University or other Federal personnel; demonstration projects; satellite training programs; "continuing education" for credit, and other direct instructional activities.

III. PROVIDE LEADERSHIP IN THE FEDERAL SYSTEM

The National Park Service (NPS) of the Department of Interior is designated as the "Lead Federal Agency for historic preservation". NPS has, over the years, developed many programs and produced numerous publications in areas of preservation. The reality is, however, that the needs for information and assistance far exceed the capacity of NPS to respond at the current time. The result is not only an opportunity, but a need for additional agencies to play a leadership role in responding to these needs. The following strategies are recommended:

A. WORK WITH NATIONAL CENTER PLANNERS AT GEORGIA TECH

The initiative of Facility Systems Division to explore this Historic Preservation Center and look at interagency cooperative potential, already demonstrates emerging leadership in this area.

CERL should become a partner in the proposed National Center for Preservation Technology as recommended by the Office of Technology Assessment of Congress in 1986. The Center for Architectural Conservation (CAC) at Georgia Tech and the Radiocarbon Laboratory at the University of California - Riverside are currently working with NPS and others to implement such a Center. CERL's experiences in many areas, but especially in project management, would make it a valued member of the Center's leadership. Leadership can be also demonstrated through all of the objectives and tasks of this report and a variety of other ways, including but not limited to:

- *maintaining a dialogue with others in the field*
- *sharing useful results with other agencies*
- *establishing a user group in historic preservation*
- *performing, interpreting and sharing needed research*
- *coordinating research with other R&D programs*
- *expanding publications and assistance programs*
- *conducting joint projects*
- *developing and maintaining a model Historic Preservation Plan*

An additional activity which would provide leadership in the Federal system would be participation in the development of research and technical assistance needs in the field of historic preservation. This could be done as a part of cooperative efforts. An effort has been started as part of the planning for a National Center for Preservation Technology, in which CAC is currently coordinating the architectural component. A preliminary listing of research needs as defined by NPS is attached as Appendix D, for informational purposes. The DOD perspective on this list as a "consumer" of information and technology, as well as a producer, could provide a valuable additional dimension to the scope.

IV. TECHNOLOGY TRANSFER TO THE PUBLIC AND PRIVATE SECTORS

The issues and problems addressed in this report, and potentially covered by the FS Historic Preservation Center, have very broad applicability not only in other government agencies (Federal, State and local), but also in the private sector. If the objectives of sections I, II and III are met, there will be an increase in interest in the FS program from numerous quarters. This is one area where programs may ultimately serve a much broader constituency.

This objective would relate to progress in the first three areas. Some of the delivery systems discussed earlier in section II.B., II.C. and II.D. may be used almost intact to meet some of the technology transfer objectives of this section.

Additional opportunities would occur through associations with some of the organizations listed in Appendix B. These opportunities could include the opportunity to write or contribute to articles in established publications or to participate in meetings and conference activities.

CERL and DOD has many successful examples of technology transfer. In the area of historic preservation, recent examples include:

- FS Presentation to APT in 1988 on Expert Systems Concepts
- FS Presentation to APT in 1989 on Expert System Demonstration
- Sept. 1989 Article in "Traditional Building" on the Window ES

There are several areas where programs and projects of CERL will have the interest of the private sector. The FS Window Expert System has already attracted the attention of two major window manufacturers. Technology transfer and commercialization may easily occur with some of the planned efforts, if there is an active dialogue between the organizations involved in delivering products and services. This is only one of what could be numerous similar examples, once the program is operational.

V. IMPROVE MATERIALS AND METHODS IN PROFESSIONAL USE

The methods, systems, programs, procedures, materials and general guidance available to the architectural and engineering professional are critical to job performance. The lack of information, bad information, or inappropriate, inefficient tools and methods will inhibit any professional's performance. Conversely, the availability of comprehensive, sound technical guidance and effective methods or systems will promote high quality results. In any case, the resources are affected and the organization's mission is impacted by the quality and availability of information, materials, tools, methods and procedures. Providing support in this area is an important goal of the FS Historic Preservation Center.

Older buildings with archaic materials and systems are especially affected by the level and quality of tools, techniques and specifications available to be used in their operation and maintenance.

This is true in part because:

- systems and materials are older and have a reduced service life
- original materials may not be available for repair/replacement
- more use of substitute materials may be necessary
- interactions between new and old materials may be unpredictable
- installation of new technological systems may require high levels of physical intervention, and
- original documentation is often missing.

A. IDENTIFICATION OF RESEARCH AND TECHNICAL NEEDS.

The emerging FS Historic Preservation Center may face a development period where user needs will far exceed the resources and staff to respond effectively. Sound investment strategy will require directing available resources to areas of highest priority and hopefully to areas with the highest "payback". The decisions regarding direction will require reliable, professional input. If successful, the activities described in section I, II and III will lead to the development of major tools to assist in identifying areas of need, as well as potential solutions which may be applied broadly to the critical problems. As a point of reference, a list of preservation research needs from NPS in 1988 is attached as Appendix D.

The results from the activities in sections I.B; I.C.; I.D; plus the information accrual from all of Section II and III will provide a continuous feedback loop for the Facility Systems Division. A model of such a system has been proposed as the basis for the National Center for Preservation Technology and is attached as Appendix E. This model conceptually represents a technological "balance sheet" of information flow.

B. DEVELOP OF AUTOMATED VENDOR SOURCE LIST (See II.C.)

C. DEVELOPMENT OF THE PRESERVATION PROCEDURES CONTROL SYSTEM (See IC/IIB)

D. DEVELOP SMALL SCALE EXPERT SYSTEMS

Small scale expert systems hold great promise to allow non-experts to do more accurate and consistent diagnosis of problems and planning. The FS Division has developed the first such system ever to be used in the historic preservation field, and it has gained national attention.

Additional areas for such applications include masonry deterioration, wood deterioration, paint problems, and virtually all other technical areas. It is recommended that CERL continue this effort and identify specific areas to develop and distribute such systems for PCs. This will ultimately lead to an array of important tools which do not exist at the present time.

E. PARTICIPATION IN CRIS DEVELOPMENT

As the development and enhancement of the Cultural Resource Information System (CRIS) continues, it may involve technical issues and areas related to building design, construction, materials, or systems. Where these areas overlap or interface with the responsibilities of the F.S. Division, the Division will be prepared to assist and contribute in appropriate ways to the CRIS development.

Selected activities of the FS Division such as the interface between expert systems, CADD and dBase may have developed procedures and explored problems which would be of value in the continued development, expansion and enhancement of CRIS. The FS Division is willing to cooperate in the discussion of any areas of joint interest under this section.

F. DEVELOPMENT OF IMAGE PROCESSING TECHNIQUES FOR IMPACT STUDIES

Increasingly powerful graphics and image processing software is creating new potential for design and technical analysis and training. An effort will be made to identify, track and utilize appropriate technology in this area, to support design and construction activities.

Immediate feedback of problems and the ability to overlay components and design solutions visually are two areas of potential value for early exploration.

G. DEVELOPMENT OF A VIDEO TAPE LENDING LIBRARY

Selected repair, maintenance and conservation techniques can best be imparted to persons unfamiliar with them, visually or through demonstrations. While live demonstrations and "hands-on" or on-site training has certain constraints, such as travel costs, video tapes and satellite broadcasts may offer some possibilities for broader distribution of visual training.

The proliferation of VHS video tape technology with camcorders, VCR's and related equipment has brought the ability to view video tapes to virtually all levels of every organization and many homes. Specialized educational programs and the increased use of video tape to document conferences, demonstrations and other training has already produced some tapes of value which could be used in training efforts.

In the future, some attention should be directed to the production, or stimulation of production, of VHS video tapes of special training and repair techniques. As tapes are identified, acquired and evaluated, a reference library of such tapes should be developed.

Methods of distribution should be developed to share the tapes effectively. This may include lending of tapes, or providing permanent copies to have located in engineering offices, or nominal charges for copying. Properly managed, this "video tape lending library" could be a powerful tool to upgrade the level of maintenance and repair to older and historical buildings. Requests for tapes on various topics can be maintained as part of the feedback loop to help plan future tapes/projects.

SUMMARY

The Facility Systems Division addresses a broad array of technical issues related to building design, construction and management. The activities outlined for the Interagency Historic Preservation program form the nucleus of a comprehensive strategy to provide badly needed technical support and information to Army facilities, to assist in the operation and maintenance of both older and historic buildings.

In achieving the goals of the program, FS Division hopes to promote:

- maximizing the usefulness of existing resources
- sharing of information for broader benefits and applications
- general improvements in technical expertise
- more effective methods and tools for facility personnel
- coordination of FS activities with other divisions and agencies.

In addition, the Facility Systems Division program includes the objective of coordination with other entities at many levels. Opportunities exist and have been identified to work with other divisions at CERL, other DOD agencies, other Federal agencies, and State and local governments. If during the implementation of the program, a dialogue and constructive collaboration can be developed between key users of preservation technology, and owners/managers of older and historic buildings, then great progress will be possible toward all the objectives of the program.

For additional information on the Facility System Interagency Historic Preservation activities, contact Mike Golish or Richard Hayes of the FS Division.

APPENDIX A
A LIST OF LAWS AND REGULATIONS
AFFECTING HISTORIC BUILDINGS

Federal Historic Preservation Laws

Laws Governing National Historic Preservation Programs

Historic Sites Act of 1935

National Historic Preservation Act of 1966, as amended

Laws Governing National Historic Landmarks

Historic Sites Act of 1935

National Historic Preservation Act of 1966, as amended

Section 8 of the General Authorities Act Amendments of 1976

Section 9 of the Mining in the National Parks Act of 1976

Laws Governing the Federal Archeology Program

Antiquities Act of 1906

Archeological and Historic Preservation Act of 1974

Archaeological Resources Protection Act of 1979

Abandoned Shipwreck Act of 1987

Laws Governing Federal Preservation Tax Incentives

Certified Rehabilitations: Section 48(g) of the Internal Revenue Code

Conservation Easements: Section 170(h) of the Internal Revenue Code

Other Major Federal Historic Preservation Laws

Transportation Act of 1966

National Environmental Policy Act of 1969

Amtrak Improvement Act of 1974

Public Buildings Cooperative Use Act of 1976

APPENDIX B
PRELIMINARY SHORT LIST
OF HISTORIC PRESERVATION INFORMATION SOURCES AND ORGANIZATIONS

PRELIMINARY SHORT LIST OF HISTORIC PRESERVATION INFORMATION SOURCES AND ORGANIZATIONS

Total sources of historic preservation technical, project and planning information will number in the hundreds, possibly well over one to two thousand sources. This preliminary short list represents a selection of the most prominent organizations which are sources of publications or other technical information. (It should be noted that there are an unlimited number of sources of relevant technical data, but which is produced outside the context of a preservation or building management interests such as those below, and may require substantial technical interpretation in order to determine its actual relevance, implications and appropriate use).

ADVISORY COUNCIL ON HISTORIC PRESERVATION

AMERICAN ASSOCIATION OF STATE & LOCAL HISTORY

ASSOCIATION FOR PRESERVATION TECHNOLOGY BULLETIN (AASLH)

BRITISH RESEARCH ESTABLISHMENT (BRE)

CONGRESS OF INTERNATIONAL BUILDING (CIB)

GENERAL SERVICES ADMINISTRATION - ART & HISTORIC PRESERVATION PROGRAM

INTERNATIONAL COMMITTEE ON THE CONSERVATION OF MONUMENTS AND SITES (ICCOMOS)

INTERNATIONAL CENTER FOR THE STUDY OF THE PRESERVATION AND RESTORATION OF CULTURAL PROPERTY (ICCROM)

INTERNATIONAL INSTITUTE FOR CONSERVATION (IIC)

NATIONAL CONFERENCE OF SHPO'S (NCSHPO)

NATIONAL INSTITUTE FOR CONSERVATION (NIC)

NATIONAL PARK SERVICE

- PRESERVATION ASSISTANCE DIVISION
- PARK HISTORIC ARCHITECTURE DIVISION
- HABS/HAER
- NATIONAL REGISTER PROGRAMS
- HISTORY DIVISION
- ARCHAEOLOGY ASSISTANCE DIVISION

NATIONAL TRUST FOR HISTORIC PRESERVATION

OLD HOUSE JOURNAL

PRESERVATION LEAGUE OF NEW YORK STATE

SOCIETY OF AMERICAN ARCHAEOLOGISTS

SOCIETY FOR INDUSTRIAL ARCHAEOLOGY

SOCIETY OF ARCHITECTURAL HISTORIANS

TECHNOLOGY AND CONSERVATION MAGAZINE

TRADITIONAL BUILDING MAGAZINE

APPENDIX C

FEDERAL CONSTRUCTION COUNCIL MEMBERS

FEDERAL CONSTRUCTION COUNCIL

ORIGIN AND PURPOSE

The Federal Construction Council (FCC), established in 1953, is a continuing activity of the Building Research Board (BRB) of the National Research Council (NRC). Its fundamental purpose is to help federal agencies having an interest in construction identify and find solutions to common problems. Because the FCC is the only organization in the United States in which the various autonomous federal construction agencies meet regularly to exchange information and address common concerns, it fills a unique and vital role.

SPONSORS

Currently, sixteen federal agencies that are responsible either for the design, construction, and operation of federal government facilities or for construction-related research participate in and provide financial support for the FCC. These agencies are:

- Department of the Air Force, Directorate of Engineering and Services
- Department of the Army, Corps of Engineers
- Department of Energy, Office of Project and Facilities Management
- Department of Navy, Naval Facilities Engineering Command
- Department of State, office of Foreign Buildings Operations
- Department of Veterans Affairs, Office of Facilities
- General Services Administration, Public Buildings Service
- National Aeronautics and Space Administration, Facilities Management Office
- National Institute of Standards and Technology, Center for Building Technology
- National Endowment for the Arts, Design Arts Program
- National Science Foundation, Division of Mechanics, Structures, and Materials Engineering
- Smithsonian Institution, Office of Facilities Services
- U.S. Public Health Service, Office of Management
- U.S. Postal Service, Facilities Department
- Construction Engineering Research Laboratory, Army Corps of Engineers
- Bureau of Reclamation of the Department of the Interior

APPENDIX D

LIST OF RESEARCH NEEDS IN HISTORIC PRESERVATION
IDENTIFIED BY THE NATIONAL PARK SERVICE IN
SEPTEMBER 1988